



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/650,033	08/28/2000	Richard Shann	S1022/8522	7631

7590

03/26/2004

James H Morris
Wolf Greenfield & Sacks PC
600 Atlantic Avenue
Boston, MA 02210

EXAMINER

HO, THE T

ART UNIT

PAPER NUMBER

2126

DATE MAILED: 03/26/2004

8

Please find below and/or attached an Office communication concerning this application or proceeding.

25

Office Action Summary

Application No.

09/650,033

Applicant(s)

SHANN, RICHARD

Examiner

The Thanh Ho

Art Unit

2126

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. This action is in response to the amendment filed 12/31/2003.
2. Claims 1-9 have been examined and are pending in the application.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-7 and 9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A. The following terms lack antecedent basis:

- (i) "said at least some code sequences" (lines 12-13 claim 1; line 11 claim 5; line 9 claim 9).

B. The claim language in the following claims is not clearly understood:

- (i) it is unclear which components in claim 1 that "its" refers to (line 6 claim 1; line 6 claim 5; line 6 claim 9).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mac OS Runtime Architecture (1997 publication).

As to claim 1, Mac teaches a method comprising module (PEF loader section, Fig. 8-6 page 15) containing sets of section data (loader header, imported library table... Fig. 8-6 page 15) and associated relocations (relocations, Fig. 8-6 page 15); a macro section (called fragment's code section, Fig. 8-9 page 25) containing code sequences (code moo, Fig. 8-9 page 25); wherein said sets of section data (loader header, imported library table... Fig. 8-6 page 15) includes insertion location (offset of moo in code section, Fig. 8-9 page 25) where code sequences (code moo, Fig. 8-9 page 25) are to be inserted (code from called fragment's code section to be inserted into the offset of moo in code section Fig. 8-9 page 25) and the relocation (relocations, Fig. 8-6 page 15) include a macro call relocation identifying a location in the macro section (a fragment calls the imported routine moo, line 2 last paragraph page 24); at link time (runtime, line 3 first paragraph of Relocations page 21) reading said sets of section data and relocation instructions (execute a relocation instruction, step 3 page 26); on locating said macro call relocation identifying the location in the macro section (a fragment calls the imported routine moo, line 2 last paragraph page 24); and inserting (code from called fragment's code section to be inserted into the offset of moo in code section Fig. 8-9 page 25) said code sequences (code moo, Fig. 8-9 page 25) from said

location in the macro section (called fragment's code section, Fig. 8-9 page 25) into the set of section data (loader header, imported library table... Fig. 8-6 page 15) at the insertion location (offset of moo in code section, Fig. 8-9 page 25), said code sequences (code moo, Fig. 8-9 page 25) being selected by reading the macro relocations (execute a relocation instruction, step 3 page 26).

Mac does not explicitly teach the code sequences are likely to be repeatedly. However, Mac (page 13-14) teaches the concept of replacing repeated code with small instructions that generate the same results (lines 3-5 first paragraph of Pattern-Initialized Data, page 10). Therefore one of ordinary skill in the art would conclude that the "code moo" discussed above is a code sequence that likely to be repeatedly since it is being inserted into the offset of moo in code section using only relocation instruction at link time.

As to claim 2, Mac as modified further teaches macro relocations (execute a relocation instruction, step 3 page 26) calculate conditions resolvable at link time (runtime, line 3 first paragraph of Relocations page 21) to determine which of code sequence (code moo, Fig. 8-9 page 25) is to be included (step 1-3 of the first paragraph page 26) in the executable program.

As to claim 3, Mac as modified further teaches a relocation (relocation header entry data structure, listing 8-5 page 23) which supplies at least one parameter (firstRelocOffset field, line 7 page 24) together with an index (sectionIndex field, line 2 page 24) for holding said parameter (firstRelocOffset field, line 7 page 24) in association

with the index in a parameter array (struct PEFLoaderRelocationHeader, listing 8-5 page 23) from which the parameter can be recalled at link time.

As to claim 4, Mac as modified further teaches a relocation (relocation header entry data structure, listing 8-5 page 23) supplies an index (sectionIndex field, line 2 page 24) for recalling said parameter from the parameter array.

As to claims 5-6, they are system claims of claims 1 and 3, respectively. Therefore, they are rejected for the same reasons as claims 1 and 3 above.

As to claim 7, it is a system claim of claims 2-4. Therefore, it is rejected for the same reasons as claims 2-4 above.

As to claim 8, Mac teaches a method comprising executing a set of assembler directives (steps 1-3 of first paragraph page 26) including a macro call directive (execute a relocation instruction, step 3 page 26); naming a location in a macro section (called fragment's code section, Fig. 8-9 page 25) in the object code module (PEF loader section, Fig. 8-6 page 15) containing code sequences (code moo, Fig. 8-9 page 25); marking at an insertion location (offset of moo in code section, Fig. 8-9 page 25) in a set of section data (loader header, imported library table... Fig. 8-6 page 15) in the object code module (PEF loader section, Fig. 8-6 page 15) where code sequences (code moo, Fig. 8-9 page 25) are to be inserted (code from called fragment's code section to be inserted into the offset of moo in code section Fig. 8-9 page 25) in the final executable program; generating a macro call relocation (execute a relocation instruction, step 3 page 26) identifying the named location (called fragment's code section, Fig. 8-9 page 25) in the macro section; and generating a set of macro

relocations (steps 1-4 from last paragraph page 26 to first two paragraphs page 27) associated with said macro section for selecting said code sequences (code moo, Fig. 8-9 page 25) for insertion (code from called fragment's code section to be inserted into the offset of moo in code section Fig. 8-9 page 25) at the insertion location (offset of moo in code section, Fig. 8-9 page 25). Note claim 1 above for the discussion of code sequence that is likely to be repeatedly.

As to claim 9, it is a computer program product claim of claim 1. Therefore, it is rejected for the same reasons as claim 1 above.

Response to Arguments

5. Applicant's arguments filed have been fully considered but are moot in view of the new ground(s) rejection.

Applicant's arguments presented issues which required the Examiner to further view the previous rejection. The Examiner conducted a further search regarding the issues mentioned in Applicant's response. Therefore, all arguments regarding the cited references of the previous rejection are moot in view of the new grounds of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to The Thanh Ho whose telephone number is 703-306-5540. A voice mail service is also available for this number. The examiner can normally be reached on Monday – Friday, 8:30 am – 5:00 pm.

Art Unit: 2126

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Any response to this action should be mailed to:

Commissioner for Patents


P.O Box 1450

Alexandria, VA 22313-1450

Or fax to:

- AFTER-FINAL faxes must be signed and sent to (703) 746 – 7238
- OFFICAL faxes must be signed and sent to (703) 746 – 7239
- NON OFFICAL faxes should not be signed, please send to (703) 746 – 7240

TTH
March 19, 2004


MENG-AL T. AN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100